IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A computer-implemented method for selecting an optimal balance between direct cost and a number of suppliers comprising:

    soliciting bids from a plurality of suppliers for a plurality of lots;

    receiving at least one bid from the plurality of suppliers for each lot;

    storing the bids from each supplier in a database; and

    upon completion of bidding for the plurality of lots, determining a first optimal solution that includes an initial family of lot-supplier assignments, iteratively reducing or increasing the number of suppliers in the family, and generating at least a second optimal solution having the reduced or increased number of suppliers;

~~generating at least a first and second optimal solution from the bids in the database without user interaction, the first optimal solution having a different number of suppliers than the second optimal solution~~

    wherein if the initial family of lot-supplier assignments has the lowest cost, the number of suppliers in the family is iteratively deceased, and wherein if the initial family of lot-supplier assignments has the highest cost, the number of suppliers in the family is iteratively increased.

2. (Previously Presented) The method of claim 1 wherein the generating comprises:

    inputting the bids into an optimization routine, including selecting the number of suppliers for each optimal solution, determining lowest bids received from the number of suppliers for the lots for each optimal solution, calculating a direct cost from the lowest bids received from the number of suppliers for each optimal solution, and

    providing each optimal solution to a buyer.

3. (Original) The method of claim 1 wherein the generating comprises:

    choosing a minimum cost; and

    determining the optimal solution with a direct cost being at least the minimum cost.

4. (Original) The method of claim 1 wherein the storing comprises:
    removing the bids from at least one undesired supplier.

5. (Original) The method of claim 4 wherein the generating comprises:
    providing the optimal solution with lowest bids from the suppliers other than the at least one undesired supplier.

6. (Original) The method of claim 1 wherein the storing comprises:
    choosing the bids from at least one preferred supplier.

7. (Original) The method of claim 6 wherein the generating comprises:
    providing the optimal solution with lowest bids from the at least one preferred supplier for the lots on which the at least one preferred supplier bid lower than other suppliers and lowest bids from the other suppliers for the lots on which the at least one preferred supplier did at least one of not bid and not bid the lowest bid.

8. (Original) The method of claim 1 wherein the generating comprises:
    ranking the bids in accordance with cost.

9. (Original) The method of claim 1 wherein the soliciting comprises:
    identifying at least one of goods and services to be purchased.

10. (Original) The method of claim 1 further comprising:
    displaying at least one of the first and second optimal solutions.

11. (Original) The method of claim 1 wherein the generating comprises:
    assigning an integer value to each lowest bid in each lot.

12. (Previously Presented) The method of claim 1 wherein the receiving comprises:
    submitting bids from

a first supplier that bid on at least one of a first lot, a second lot, a third lot and a fourth lot,

a second supplier that bid on at least one of the first lot, the second lot, the third lot and the fourth lot,

a third supplier that bid on at least one of the first lot, the second lot, the third lot, and the fourth lot, and

a fourth supplier that bid on at least one of the first lot, the second lot, the third lot, and the fourth lot.

13. (Previously Presented) The method of claim 12 wherein the generating comprises:

calculating the first and second optimal solutions, including

the first optimal solution, having a first cost, for three suppliers, the first optimal solution listing the first supplier as a provider for at least one of the first, second, third and fourth lots and having a first cost, the third supplier as the provider for at least one of the first, second, third, and fourth lots, and the fourth supplier as the provider for at least one of the first, second, third and fourth lots, and

the second optimal solution, having a second cost, for two suppliers, the second optimal solution listing the third supplier as the provider for at least one of the first, second, third, and fourth lots, and the fourth supplier as the provider for at least one of the first, second, third and fourth lots.

14. (Original) The method of claim 1 further comprising: selecting one of the optimal solutions.

15. (Cancelled)

16. (Currently amended) A system for selecting an optimal balance between direct cost and a number of suppliers comprising:

a database for receiving and storing bid information from a plurality of suppliers for a plurality of lots; and

software for generating, upon completion of bidding for the plurality of lots, a first optimal solution that includes an initial family of lot-supplier assignments, iteratively reducing or increasing the number of suppliers in the family, and generating at least a second optimal

solution having the reduced or increased number of suppliers, wherein if the initial family of lot-supplier assignments has the lowest cost, the number of suppliers in the family is iteratively decreased, and wherein if the initial family of lot-supplier assignments has the highest cost, the number of suppliers in the family is iteratively increased ~~at least a first and second optimal solution from the bid information without user interaction, the first optimal solution having a different number of suppliers than the second optimal solution~~.

17. (Original) The system of claim 16 wherein the bid information comprises at least one bid from a supplier for each lot.

18. (Original) The system of claim 16 wherein at least one of the first and second optimal solutions comprises a chosen supplier for each lot.

19. (Currently amended) A computer program product ~~machine readable medium that~~ for ~~selects~~ selecting an optimal balance between direct cost and a number of suppliers, the computer program product being embodied in a computer readable medium and comprising computer instructions for:

a ~~first machine readable code that receives and stores~~ receiving and storing bid information from a plurality of suppliers for a plurality of lots;

a ~~second machine readable code that generates at least a first and second optimal solution from the bid information without user interaction~~ determining, upon completion of bidding for the plurality of lots, a first optimal solution that includes an initial family of lot-supplier assignments, iteratively reducing or increasing the number of suppliers in the family, and generating at least a second optimal solution having the reduced or increased number of suppliers ~~the first optimal solution having a different number of suppliers than the second optimal solution~~; and

a ~~third readable code that transmits~~ transmitting the optimal solutions to a buyer;

wherein if the initial family of lot-supplier assignments has the lowest cost, the number of suppliers in the family is iteratively decreased, and wherein if the initial family of lot-supplier assignments has the highest cost, the number of suppliers in the family is iteratively increased.

20. (Currently amended) The ~~machine-readable medium~~ computer program product of claim 19 wherein the bid information comprises at least one bid from a supplier for each lot.

21. (Currently amended) The ~~machine-readable medium~~ computer program product of claim 19 wherein at least one of the first and second optimal solutions comprise a chosen supplier for each lot.

22. (Currently amended) The ~~machine-readable medium~~ computer program product of claim 19 wherein the bid information comprises: at least one bid on a first, second, third, and fourth lot from a first supplier; at least one bid on the first, second, third, and fourth lots from a second supplier, at least one bid on the first, second, third, and fourth lots from a third supplier, and at least one bid on the first, second, third, and fourth lots from a fourth supplier.

23. (Currently amended) The ~~machine-readable medium~~ computer program product of claim 22 wherein the first and second optimal solutions comprise: the first optimal solution, having a first cost, for three suppliers, the first optimal solution listing the first supplier as a provider for at least one of the first, second, third and fourth lots, and having a first cost, the third supplier as the provider for at least one of the first, second, third, and fourth lots, and the fourth supplier as the provider for at least one of the first, second, third and fourth lots; and the second optimal solution, having a second cost, for two suppliers, the second optimal solution listing the third supplier as the provider for at least one of the first, second, third, and fourth lots, and the fourth supplier as the provider for at least one of the first, second, third and fourth lots.